

buffer (būf'ər)

1. A mixture of an acid and its conjugate base (salt), such as $\text{H}_2\text{CO}_3/\text{HCO}_3^-$; $\text{H}_2\text{PO}_4^-/\text{HPO}_4^{2-}$, that, when present in a solution, reduces any changes in pH that would otherwise occur in the solution when acid or alkali is added to it; thus, the pH of the blood and body fluids is maintained relatively constant (pH 7.45) although acid metabolites are continually being formed in the tissues and CO_2 is lost in the lungs. See Also: conjugate acid-base pair
2. To add a buffer to a solution and thus give it the property of resisting a change in pH when it receives a limited amount of acid or alkali.

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